

WHAT IS CLAIMED IS:

1 A method of displaying nodes within a network topology, the method
 2 using a processor coupled to a display screen, the method comprising:
 3 forming a first layer of a multi-layer representation wherein at least two nodes
 4 are represented separately;
 5 grouping the nodes of the first layer into group nodes to form a second layer in
 6 the multi-layer representation;
 7 grouping the group nodes of the second layer into a third layer, the third layer
 8 having at least one connected-superset node containing group nodes with nodes connected to
 9 each other, and at least one isolated-superset node containing group nodes having nodes
 10 isolated from each other; and
 11 displaying the superset nodes in the third layer so the connected-superset node
 12 is separate from the isolated-superset node and such that the connected-superset node is
 13 selectively expandable to display group nodes and connections between the nodes, and the
 14 isolated-superset node is selectively expandable to display group nodes of the second layer.

1 2. The method of claim 1, wherein the step of forming comprises a step
 2 of creating a graph of nodes to be displayed in the network as a leaf graph.

1 3. The method of claim 2, wherein the leaf graph includes components
 2 and interconnection paths of the network.

1 4. The method of claim 1 wherein the group nodes in the connected-
 2 superset node are laid out according to layout rules.

1 5. The method of claim 4 wherein the group nodes in the connected-
 2 superset node comprises any one or more of switch groups and host groups.

1 6. The method of claim 5 wherein a layout rule consists of the switch
 2 group with the highest connectivity being placed in the center of the connected-superset node.

1 7. The method of claim 1 wherein the connected-superset node is fully
 2 expandable while the isolated-superset node is minimized.

1 8. The method of claim 1 wherein the isolated-superset node comprises
 2 any one or more of unmapped hubs and isolated switches.

1 9. The method of claim 1 wherein the isolated group node consists of
2 isolated devices other than unmapped hubs and isolated switches.

1 10. A method of displaying nodes within a network topology, the method
2 using a processor coupled to a display screen, the method comprising:

3 forming a first layer of a multi-layer representation wherein at least two nodes
4 are represented separately;

5 grouping the nodes of the first layer into group nodes to form a second layer in
6 the multi-layer representation;

7 grouping the group nodes of the second layer into a third layer, the third layer
8 having at least one connected-superset node containing group nodes with nodes connected to
9 each other, but not connected to any other nodes belonging to other connected-superset
10 nodes; and

11 displaying the connected-superset node in the third layer such that the
12 connected-superset node is selectively expandable to display group nodes and connections
13 between the nodes.

1 11. The method of claim 10 wherein grouping the group nodes of the
2 second layer into a third layer further comprises, the third layer having at least one isolated
3 superset node containing group nodes having nodes isolated from each other; and

4 displaying the superset nodes in the third layer so the connected-superset node
5 is separate from the isolated-superset node and such that the connected-superset node is
6 selectively expandable to display group nodes and connections between the nodes, and the
7 isolated-superset node is selectively expandable to display group nodes of the second layer.

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